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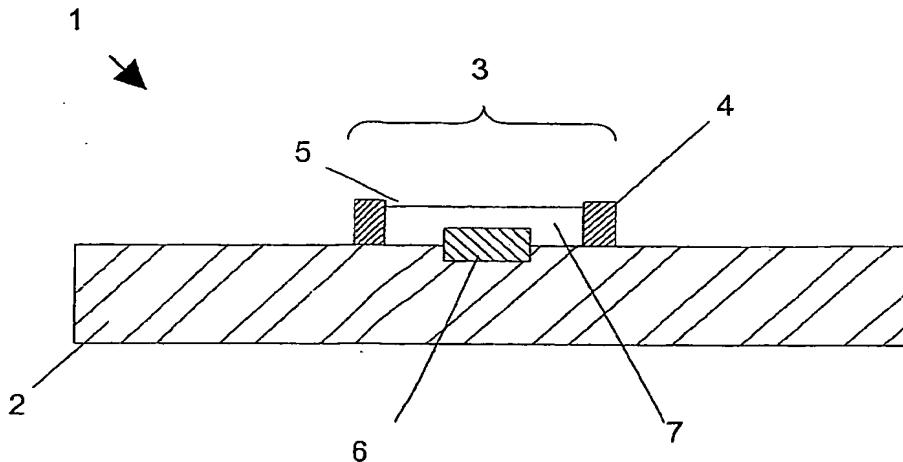
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(57) Abstract: This invention relates to a sensor suitable for detecting the presence of one or more analytes. The sensor comprises a substrate; a confinement structure disposed on the substrate, wherein the confinement structure comprises at least a first limiting structure defining a first interior space; a transducer proximal to the first interior space; and a first synthetic polymer capable of selectively binding a first analyte, within the confinement structure. The confinement structure may have a second or further limiting structure defining a second or further interior space containing the first or preceding interior space. The sensor may also have additional confinement structures containing different materials for detecting additional analytes or taking reference measurements.



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